

Instruction Manual

1. Marking

Fiber Optic Media Converter Box PSC2.CP.SR.26.26.16-Y7017109*
ATEX certificate: CESI 17 ATEX 013 X ATEX marking: Ⓢ II 3G Ex eb ec nA nC T4 IIC Gc Ⓢ II 3D Ex tb T130°C IIIC Dc
IECEx certificate: IECEx CES 18.0012X IECEx marking: Ex eb ec nA nC T4 IIC Gc, Ex tb T130°C IIIC Dc
North America Certificates: cETLus 5003368 Associated apparatus with intrinsically safe circuits for: Class I, Division 2, Groups A-D, T4 Class II, Division 2, Groups F, G, T135°C

The *-marked letters of the type code are placeholders for versions of the device.

Pepperl+Fuchs Group Lilienthalstraße 200, 68307 Mannheim, Germany
Internet: www.pepperl-fuchs.com

2. Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismantling lies with the plant operator.

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismantling of the device. The trained and qualified personnel must have read and understood the instruction manual.

3. Reference to Further Documentation

Observe directives, standards, and national laws applicable to the intended use and the operating location.

Examples for such regulations are regulations regarding electricity, grounding, installation as well as hygiene and safety.

The corresponding datasheets, instruction manuals, manuals, declarations of conformity, EU-type examination certificates, certificates, and control drawings if applicable supplement this document. You can find this information under www.pepperl-fuchs.com.

For specific device information such as the year of construction, scan the QR code on the device. As an alternative, enter the serial number in the serial number search at www.pepperl-fuchs.com.

For more information refer to manufacturer declaration.

You can find the data for electrical values and parameters in the corresponding datasheets.

Observe the instruction manuals for the associated components.

Observe the instructions according to NEC article 501.

4. Intended Use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

Take the intended use of the installed devices from the corresponding documentation.

The device is used

- to extend the communication range between Ethernet devices
- to communicate over longer distances
- and improving network flexibility.

The device is a Class 1 laser product according to EN 60825-1.

The device can connect up to 4 Ethernet devices to a fiber optic network.

The device is certified for use in Zone 2/22 and Class I, II, Division 2.

Use the device only within the specified ambient and operating conditions. Modifications are permitted only if approved in this instruction manual and in the device-related documentation.

Observe the instruction manual and the certificate of the installed apparatus.

Observe the specific conditions of use.

Observe the schedule of limitations.

The device can be used in hazardous areas containing non-conductive, combustible dust.

The device is designed for wall mounting.

The device can be used outdoor.

5. Improper Use

Protection of the personnel and the plant is not ensured if the device is not used according to its intended use.

6. Mounting and Installation

Prior to mounting, installation, and commissioning of the device you should make yourself familiar with the device and carefully read the instruction manual.

Do not mount a damaged or polluted device.

Only use accessories specified by the manufacturer.

Use mounting materials which are suitable to secure the device safely.

The permitted ambient temperatures of the built-in components must not be exceeded.

Only connect a voltage that is permissible for the application.

Observe the maximum voltage in the event of a fault.

Do not connect active devices to the device.

6.1. Requirements for Surrounding Enclosures

If mounting the enclosure on concrete use expansion anchors.

When mounting the enclosure to a steel framework use vibration resistant mounting material.

To mount the enclosure, use the fasteners provided.

Protect the device against long-term or excessive mechanical vibrations.

Use the screws to mount the housing so that it remains secure even in the event of possible mechanical vibrations.

Ensure that all fasteners are present.

Observe the tightening torque of the screws.

Safety-relevant markings are found on the nameplate supplied.

Ensure that the nameplate is present and legible. Take the ambient conditions into account.

Additional warning markings may be on separate labels besides the nameplate.

Before fixing the enclosure cover to the enclosure, protect the flamepath surfaces with a thin layer of suitable protective grease.

6.2. Requirements for Cables and Connection Lines

Only use cables and connection lines with a temperature range appropriate to the application.

Observe the permissible core cross section of the conductor.

Observe the insulation stripping length.

When using stranded conductors, crimp wire end ferrules on the conductor ends.

The cables and connection lines must not be strained. Provide an adequate strain relief.

Observe the minimum bending radius of the cables and connection lines.

Unused cables and connection lines must be either connected to terminals or securely tied down and isolated.

6.3. Requirements in Relation to Electrostatics

Avoid electrostatic charges which could result in electrostatic discharges while installing, operating, or maintaining the device.

6.4. Requirements for Hazardous Area

If the device has already been operated in general electrical installations, the device may subsequently no longer be installed in electrical installations used in combination with hazardous areas.

Observe the installation instructions according to IEC/EN 60079-14.

If the enclosure has an external ground connection, connect an equipotential bonding conductor with a minimum cross section of 4 mm² to this ground connection.

Install the device in accordance with the applicable requirements of the NEC/CEC and the local authorities having jurisdiction.

The device may be installed in gas groups IIC, IIB, and IIA.

Only remove the cover in the absence of a potentially explosive atmosphere.

The device may be used as non-sparking apparatus.

Usage in Dust Groups IIIA/IIIB/IIIC

The device may be installed in dust groups IIIC, IIIB, and IIIA.

Type of Protection Ex nA

Install the connection lines in a way that the installation meets the requirements of the type of protection Ex nAc.

Type of Protection Ex e

If intrinsically safe and non-intrinsically safe circuits are being operated together, the connections of the non-intrinsically safe circuits must be covered. The cover must comply with degree of protection IP30 according to IEC/EN 60529.

Do not connect or disconnect increased safety circuits when the circuits are energized and a potentially explosive atmosphere is present.

Requirements for Degree of Protection (IP)

To ensure the degree of protection, consider the following points: Mount the device so that it complies with the specified degree of protection according to IEC/EN 60529.

Ensure that the enclosure is not damaged, distorted, or corroded.

Ensure that all seals are clean, undamaged, and correctly fitted.

Tighten all screws of the enclosure/enclosure cover with the appropriate torque.

For cable glands only use incoming cable diameters of the appropriate size.
Tighten all cable glands with the appropriate torque.
Close all unused enclosure holes with the appropriate stopping plugs.

7. Operation, Maintenance, Repair

Prior to using the product make yourself familiar with it. Read the instruction manual carefully.
Secure the device against unintended operation.
Observe the warning markings.
Do not repair, modify, or manipulate the device.
When detecting a damage, remove the device from the hazardous area.
If there is a defect, always replace the device with an original device.
Do not use a damaged or polluted device.
Ensure that the seals are in good condition and are not damaged.
If cleaning is necessary while the device is located in a hazardous area, in order to avoid electrostatic charging only use a clean damp cloth.
Only open the device in the absence of a potentially explosive atmosphere.
To avoid causing serious damage to your eyes, do not stare into the laser beam.

7.1. Requirements for Hazardous Area

Observe the requirements according to IEC/EN 60079-14 during operation.
Observe IEC/EN 60079-17 for maintenance and inspection.

Usage in Gas Group IIC

The device may be operated in gas group IIC.

Usage in Zone 2

The device may be operated in Zone 2.

Usage in Zone 22

When energized, only open the housing in the absence of a potentially explosive dust atmosphere.

8. Delivery, Transport, Disposal

Check the packaging and contents for damage.
Check if you have received every item and if the items received are the ones you ordered.
Store the device in a clean and dry environment. The permitted ambient conditions must be considered, see datasheet.
The device, built-in components, packaging, and any batteries contained within must be disposed in compliance with the applicable laws and guidelines of the respective country.